

Moreover, the present application, at the time the present invention was made, was subject to an obligation of assignment to Lucent Technologies Inc. An assignment of the present application to Lucent Technologies Inc. was recorded in the U.S. Patent Office on February 19, 1999 at Reel 9804, Frame 0849. Therefore, should Applicant file a continuation of the present application, that continuation, as an application filed after November 29, 1999, would be entitled to the benefit of 35 U.S.C. §103(c). As a result, the Choudhury reference, which is available as a reference only under §102(e), would then be unavailable for use by the Examiner in a rejection under 35 U.S.C. §103(a). Applicant expressly reserves the right to file such a continuation application in order to obtain the benefit of §103(c).

Applicant respectfully traverses the §102(e) rejection of claims 1, 2 and 9-17 over Choudhury. The Examiner in formulating this rejection argues that Choudhury in FIG. 2 shows a system meeting the limitations of independent claims 1, 9, 15 and 16. For the reasons outlined below, Applicant respectfully disagrees.

Applicant initially notes that MPEP §2131 specifies that a given claim is anticipated "only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," citing Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Moreover, MPEP §2131 indicates that the cited reference must show the "identical invention . . . in as complete detail as is contained in the . . . claim," citing Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). For the reasons identified below, Applicant submits that the Examiner has failed to establish anticipation of at least independent claims 1, 9, 15 and 16 by the Choudhury reference.

Independent claim 1 is directed to a method for interconnecting a calling party asynchronous transfer mode system having a calling party host and a called party asynchronous transfer mode system having a called party host, using an intermediate switching asynchronous transfer mode network and a border node associated with each asynchronous transfer mode system. The method includes the step of routing a call from said calling party host to said called party host over the intermediate switching asynchronous transfer mode network based on an intermediate switching ATM network addressing scheme that is recognized by said border nodes and independent of an addressing scheme of said asynchronous transfer mode systems.

Applicant submits that such an arrangement is not shown in Choudhury. More particularly, there is no teaching or suggestion that the “other domains” shown in FIG. 2 of Choudhury correspond to the claimed intermediate switching asynchronous transfer mode network that utilizes an intermediate switching ATM network addressing scheme that is recognized by said border nodes and independent of an addressing scheme of said asynchronous transfer mode systems. In contrast, there is apparently only a single addressing scheme being used throughout the different domains of the FIG. 2 system in Choudhury. For example, Choudhury refers to the system in FIG. 2 as a network 100 that is “subdivided” into domains (Choudhury, column 6, lines 4-5), and indicates that a single ATM addressing scheme is used throughout the network 100 (Choudhury, column 5, line 46, to column 6, line 51). In addition, at column 15, lines 38-41, Choudhury states as follows with regard to identifiers of the end hosts:

It is noted that the MIDs or VCIs should be distributed among the end hosts such that a unique identifier is used for each endpoint. These identifiers may be assigned in the original setup request by the requesting node or they can be assigned by the connection server receiving the setup request.

This passage also suggests that a single ATM addressing scheme is used in the FIG. 2 system of Choudhury. The network 100 is apparently subdivided into domains only for purposes of implementing parallel connection control.

The Examiner in the final Office Action at pages 5-6, section 4, argues that column 3, lines 55-65 and column 4, lines 10-15 of Choudhury are anticipatory of the limitations of claim 1 regarding the step of “routing a call from said calling party host to said called party host over the intermediate switching asynchronous transfer mode network based on an intermediate switching ATM network addressing scheme that is recognized by said border nodes and independent of an addressing scheme of said asynchronous transfer mode systems.” The relevant portions of Choudhury relied upon by the Examiner state as follows, with emphasis supplied:

Turning to FIG. 1, when an ingress switch, a switch that is connected to an end host that generates the incoming connection setup request message, such as switch SW₁ in network 10, receives a signaling request for the setup of an on-demand connection from an end host 11, it determines the route of the connection using one of the two approaches described above.

In the ITU-T B-ISUP signaling procedure, the optimal table-based routing scheme is employed. Based on the address of a destination party, such as end host 12, indicated in the connection setup signaling request, switch SW₁ determines the next switch in the route by consulting a routing table M₁, which maps each destination address, such as the address of the end host 12, to a next switch identifier. In FIG. 1, the next switch is SW₂ since the virtual path connection is treated as a pre-established logical link. Signaling messages are sent hop-by-hop with this operation being performed at each switch to determine the next switch through which to route the connection.

In the ATM Forum P-NNI signaling procedure, the shortest-path table-based routing scheme is employed. The ingress switch SW₁ computes a route of switches based on its local information about the current network topology and status by performing a generic connection admission control ("GCAC") and shortest-path algorithm. It forms a designated transit list ("DTL") of this set of switches. Signaling messages are sent hop-by-hop along this set of transit switches. In large networks, switches are arranged hierarchically in peer groups. In such networks, the DTL computed at an ingress switch consists of a full detailed path within the ingress switch's own peer group and less detailed paths within other peer groups in the connection. A border node in each subsequent peer group will determine the exact set of transit switches to route the connection through its peer group.

The B-ISUP and P-NNI are thus two different signaling procedures for providing updated routing information to the switches of an ATM network. These signaling procedures cannot be characterized as different "addressing schemes" within the meaning of claim 1. Instead, the use of these different

signaling procedures to convey routing information is consistent with the use of a single ATM addressing scheme throughout the network.

Dependent claim 2 is believed to be allowable for at least the reasons identified above with regard to claim 1, and is also believed to define additional patentable subject matter. For example, there is no teaching or suggestion in Choudhury regarding the claimed substituting, at the border node of the calling party asynchronous transfer mode system, in a called party address information element, an intermediate switching asynchronous transfer mode network address of the border node of the called party asynchronous transfer mode system for the asynchronous transfer mode system address of the called party host. The Examiner argues that such substitution is disclosed in Choudhury by translating of VPIs and VCIs from switch to switch. However, such translation will apparently also be done in establishing a connection from one switch to another within a single domain. The mere presence of such translation does not anticipate the claimed substitution, which requires an intermediate ATM network addressing scheme which is independent of that used in the calling party and called party systems.

With regard to independent claim 9, this claim specifies that calling party and called party asynchronous transfer mode systems have an addressing scheme independent from the addressing scheme of an intermediate switching asynchronous transfer mode network, and that border nodes interface between the addressing scheme of the asynchronous transfer mode systems and the intermediate switching asynchronous transfer mode network addressing scheme. As discussed above in conjunction with claims 1 and 2, such an arrangement is not taught or suggested by the Choudhury reference. Instead, Choudhury apparently makes no distinction between particular addressing schemes used in the various domains of network 100, with the result that network 100 operates using a single addressing scheme.

The Examiner in the final Office Action at page 6, second paragraph, states that the limitation “addressing scheme used in various domains of network” is not in claim 9. The Examiner has misconstrued the argument presented by Applicant. Applicant is not arguing that this particular language is a limitation of claim 9. What Applicant is arguing is that Choudhury does not teach or suggest the use of different addressing schemes in the various domains of network 100. As a result, Choudhury apparently operates with a single addressing scheme throughout the network 100, and

therefore fails meet the limitations of claim 9 regarding calling party and called party asynchronous transfer mode systems that have an addressing scheme independent from the addressing scheme of an intermediate switching asynchronous transfer mode network.

Dependent claims 11-14 are believed allowable for at least the reasons identified above with regard to independent claim 9.

Independent claims 15 and 16 each call for a type of address substitution which is not taught or suggested in Choudhury. As noted above, it is believed that VPI/VCI translation within a given ATM network does not anticipate substituting, at a calling party border node, an intermediate switching asynchronous transfer mode network address of a called party border node for an asynchronous transfer mode system address of a called party host. Similarly, VPI/VCI translation within a given ATM network does not anticipate substituting, at a called party border node, an asynchronous transfer mode system address of the called party host for an intermediate switching asynchronous transfer mode network address of the called party border node.

The Examiner in the final Office Action at page 6, third paragraph, argues that the particular address substitution limitations of claims 15 and 16 are taught in the above-cited passage from column 3, lines 55-65. Applicant respectfully disagrees. As indicated previously, the passage at issue refers the conventional B-ISUP signaling procedure for providing updated routing information to the switches of an ATM network. In conjunction with this procedure, a given switch uses a routing table to determine the next switch which is to receive the connection.

However, this routing table based address lookup cannot reasonably be construed as teaching the specific address substitution limitations of claims 15 and 16. For example, claim 15 calls for "substituting at a calling party border node an intermediate switching asynchronous transfer mode network address of a called party border node for an asynchronous transfer mode system address of a called party host." Simply looking up in a routing table at a given switch the address of the next switch in the connection does not teach or suggest the particular substitution step that is claimed. Similarly, claim 16 calls for "substituting at a called party border node an asynchronous transfer mode system address of the called party host for an intermediate switching asynchronous transfer mode network address of the called party border node." Again, simply looking up in a routing table

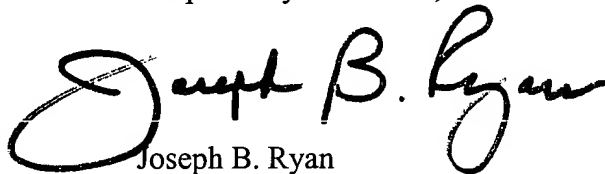
at a given switch the address of the next switch in the connection does not teach or suggest the particular substitution step that is claimed.

Independent claim 17 includes limitations similar to those of allowed independent claim 6, and is therefore also believed to be allowable.

In view of the above, Applicant believes that claims 1-17 are in condition for allowance, and respectfully requests withdrawal of the §102(e) rejection.

As indicated above, a Notice of Appeal is submitted concurrently herewith.

Respectfully submitted,

A handwritten signature in black ink, reading "Joseph B. Ryan". The signature is written in a cursive style with a large, looping initial "J".

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